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Curriculum as Strategy

The Scope and Organization of Business Education in Liberal Arts Colleges

The essence of strategic management is that organizations are engaged in continual adaptation to changing environmental conditions and circumstances (e.g., Grant, 1998). In higher education, strategic management decisions span multiple policy areas. For college administrators, variability in internal and external domains, such as funding source, student body, faculty characteristics, and facilities, can all be factors that drive organizational policy, individually or collectively. This article focuses on curriculum as an organization strategy in liberal arts colleges. The central issue I explored is the relationships between curriculum choices, on the one hand, and structure and performance, on the other. An empirical examination of business curriculum in 182 liberal arts colleges follows an introductory discussion of the interplay between curriculum and strategy in general, and in the liberal arts college environment in particular.

Curriculum is strategic in its character for two principal reasons. First, all major internal and external decision domains—resources, markets, internal process, and organizational structure—are affected by curriculum choices. Ultimately, it can be argued, all decisions made by educational institutions are rooted in the content and format of their educa-

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tional program. Second, an educational institution's curriculum can be seen both in a purpose-directed action framework and in the broad perspective that Mintzberg (1988) proposed as an analytic framework for strategy. Mintzberg argued that the construct space of strategy holds more than simply a series of choices made in order to attain overtly stated goals. He suggested that, in addition, strategy includes an institution's position in its competitive environment and its outlook or perspective on the environment. Moreover, he maintained that strategy was not even always purposeful but could sometimes be seen more clearly in retrospect as a pattern of activities. The design and implementation of curriculum policies show "emergent" as well as "deliberate" strategies. This view is consistent with other prominent approaches to strategic management (e.g., Miles & Snow, 1978).

Strategic management in higher education has previously been studied by Chaffee (1984), Chaffee and Tierney (1988), and Hardy (1990, 1996), among others. A review of their work suggests that issues of leadership, financial management, external relations, and infrastructure have been at the center of most previous scholarly analyses of strategy in higher education. In Chaffee's (1984) ten pseudonymous case analyses, the academic program—i.e., curriculum—receives relatively little attention, compared to the emphasis given to linear, adaptive, and interpretive models of how strategy is formed. Similarly, Hardy uses academic institutions in Canada (1990) and Brazil (1996) to show how strategic processes of various types play out in a framework of studying organization culture and the management of the strategic process. Gumport (1987) suggests that departmentalization and the emergence of disciplinary autonomy are powerful forces affecting curricular change.

The emphasis in this study, however, is not so much on the *process* of strategy as on strategic *content*, i.e., what strategic decisions are made, rather than how strategy is decided. Kotler and Murphy (1981) point out that program modification is one element of response to product/market environment in higher education. Among other things, program or curriculum is one way that competitors differentiate their offerings to prospective customers. As students select among institutions of higher education, the appropriate institution type is one element of their choice. The alternatives in the American higher education marketplace—private research universities, public and/or land-grant universities, community colleges, and liberal arts colleges—differ in a number of relevant ways: size, heritage, focus on the baccalaureate, and, in large measure, curriculum. Among these types, liberal arts colleges are a paragon, a distinct social and professional model of higher education. Some elements of this archetype include private status, a history originating in the eigh-



teenth or nineteenth century, and a focus on baccalaureate education using pedagogy oriented to small group learning.

Curriculum is a fundamental element of the liberal educational tradition, in terms both of the content and pedagogy that are included and those that are left out. Certain things belong: traditional liberal arts subjects, such as fine arts, humanities and natural sciences, general (as opposed to applied) study of the social sciences, and a pedagogy that favors small class learning (e.g., Association of American Colleges, 1985; Bonvillian & Murphy, 1996; Crimmel, 1993; Daly, 1992; Gustafson, 1995; Ridley & Gallaer, 1993). But education that is specifically associated with the professions, in particular the profession of business management, is treated as belonging to some other educational paradigm.

Some professional programs, such as those in education or public administration, connect more smoothly to the liberal educational tradition. Both of these broad subject areas lead to the kinds of careers in public service for which the liberal arts college was long expected to train its students. By contrast, business appears to be a foreign subject, both in its intellectual foundation and in its focus on technique. According to Kraatz and Zajac (1997), "If there is one unifying historical normative belief or value held by the various constituents of non-profit, private liberal arts colleges, . . . it is that liberal arts colleges are not intended to be schools for professional, career-oriented training." Gustafson's (1995) commentary is even more specific: "Liberal arts colleges . . . emphasize commitment to social programs in ways that heighten the role of academe as critic of society in general and of business institutions in particular."

In Kushner (1997) it is suggested that this exclusion originates in the heritage of liberal arts colleges, their institutional characteristics, and their market niche in higher education. The tradition and heritage of liberal education, through a combination of inertia and conviction, define the liberal arts as an educational strategy. Some institutional pressures against business education include the preeminence of the professional structure of the liberal arts disciplines combined with prejudices against the higher pay scales reportedly earned by business educators (Matasar, 1986). Additionally, there appears to be continuing market demand for an undergraduate education that deemphasizes functional employment during the undergraduate years, as suggested by slowly rising rates of majors awarded in the liberal arts by all institutional types (Gilbert, 1995).

The paradigmatic view of liberal education may to some extent describe a period of history that ended in the 1970s. It is clear that in recent decades private baccalaureate colleges in the United States have increased the absolute and proportional weight of profession-driven subject matter in their overall curricula (Breneman, 1994; Kraatz & Zajac, 1997). Kraatz and Zajac, using an institutional theory perspective, account for this in part as a result of mimetic isomorphism, through which a college might maintain legitimacy as a member of a changing population. Breneman (1994, p. 139) refers to it as a "dominant strategy" needed for survival.

These studies look at professional programs in general but do not address the composition of business education in the liberal arts context or the question of how business education affects institutional outcomes such as reputation. The central research question of this article is thus framed as an empirical examination of how business—in particular, the disciplines of accounting, finance, management, and marketing—is taught in liberal arts colleges, and how such teaching affects important organizational outcomes. Three separate research questions are addressed in this examination.

First, while there is an impression of within-population uniformity with respect to institutional type, there is variation in curriculum (Breneman, 1994, Kraatz & Zajac, 1997). One purpose of the empirical research is to evaluate actual business curricula in liberal arts colleges, to see how they vary among institutions, and to identify some correlates of between-college variation in strategy. Second, linkages between business curricula and disciplinary mainstreams are explored. Third, although adding professional programs to a conventional liberal arts curriculum represents a departure from tradition, its effect on overall performance and reputation is unknown and thus is also a matter of empirical interest. Taken together, answers to these three questions can help researchers and curriculum planners in higher education understand the role of curriculum in strategic management.

This study addresses these questions using primary data obtained from the catalogs of a broad sample of nationally recognized liberal arts colleges supplemented with secondary data from professional directories. In this way it differs from prior studies done at arm's length using only secondary data. Breneman (1994) used data from the National Center for Educational Statistics and College Board in his statistical analyses; Kraatz and Zajac (1997) similarly use NCES data to measure changes in professional majors from 1971 to 1987. It also differs from Chaffee and Tierney's (1988) and Chaffee's (1984) studies, which consist primarily of case analyses. In this study, data obtained from analysis of college catalogs are at the center of the analysis; supplementary and control data come from directories and published sources.

Subsequent sections describe how the sample of colleges was se-



lected, which data were obtained about each, and what procedures were used to measure the amount of business education. Descriptive data are presented concerning how many business, business-related economics, and applied administration courses are offered in the liberal arts colleges as well as how the business curriculum is organized. Additional analyses show how the presence of a business curriculum is related to variation in organizational factors and how organization performance is related to business education. The article concludes with a discussion of implications for strategy.

Methods

The study examines a group of colleges that are highly representative of the liberal arts paradigm. A sample of 182 colleges was selected. Each was classified as a Liberal Arts I College in the Carnegie Foundation's *A Classification of Institutions of Higher Education* (Carnegie Foundation 1994) or was included in any of the U. S. News & World Report (USNWR) annual rankings of National Liberal Arts Colleges from 1993 through 1996. The full list of colleges is in the Appendix. This group is smaller than Breneman's (1994), which included colleges with less than 60% of degrees awarded in professional subjects. The USNWR ratings examine a larger group than the Carnegie listing of Liberal Arts I colleges, because USNWR includes institutions that award more than 40% of degrees in liberal arts fields and are restrictive in admissions.

Data on college founding and region were taken from each college's catalog. Undergraduate and graduate enrollment figures for the 1995–96 year were taken from *Peterson's Guide to Four-Year Colleges* (1997). The number of full-time faculty were listed in the annual Report on the Financial Status of the profession 1995–1996 in the March 1996 issue of *Academe*. Each catalog also specified the majors (sometimes called "concentration") that the college offered. Colleges were coded as "elite" if they were in the "Top 25" in the 1993, 1994, 1995, or 1996 USNWR rankings. These colleges—42 out of the 182—are marked with an asterisk in the Appendix.

Performance or organizational effectiveness in higher education is a complex, multivariate construct (Cameron, 1986), and designation as "elite" is not a sufficient instrumentation of performance. Kushner and Poole (1996) presented a model in which constituency satisfaction, resource acquisition effectiveness, internal process, and goal attainment were components that each contributed directly and indirectly to overall organizational success. They argued that *ceteris paribus*, measures that addressed multiple activity areas were better than single indicators of an

organization's performance. A superior measure, according to this approach, is that published in Breneman (1994), combining financial stability, enrollment, and selectivity, using data collected for 1989–90.

Because a strong reputation is unquestionably a goal that colleges seek to attain, the 1995 USNWR ratings themselves provide a second measure of performance. Though there has been substantial criticism leveled in recent years about the validity of the USNWR ratings as actual measures of organizational effectiveness (e.g., Rothkopf, 1995), they remain widely accepted measures of reputation, and there is undoubtedly some useful performance-related information content in their rank ordering. Raw USNWR rankings range from 1 to 160, while the Breneman rankings range from 17 to 536. The correlation between the Breneman and USNWR ratings was 0.799, n = 125, p < 0.001.

The integration of the business curriculum with professional scholarship in the various business disciplines was measured in two ways. One was by determining if each college had one or more faculty members who was affiliated with the leading professional group for a particular discipline. Membership information was obtained from published directories of the American Economics Association, American Marketing Association, Financial Management Association, and staff of the American Accounting Association and Academy of Management. The second measure was a binary (yes/no) measure of whether the school was accredited by the American Assembly of Collegiate Schools of Business (AACSB) in 1995–96.

Each course catalog provided data describing the business curriculum. Previous studies on various aspects of curriculum (e.g., Burnett 1997, Frank, Schofer, & Torres, 1994; Whaalen & Wilson, 1991) have similarly used catalog data and have taken course listings at their face value as indicators of the content of the courses. The 1995/96 catalogs were searched for courses relating specifically to business and the administration of other professional disciplines, and these courses were coded and tallied according to the procedures described below.¹ Each catalog was reviewed by two undergraduate students and then by the author to ensure consistent coding across all cases.

The key terms that signalled relevance to business were those describing the economics of the firm and the business disciplines and their subfields. All course titles and descriptions were examined for specific reference to business and/or administration of commercial or professional activities. The search focused in particular on departments and subjects whose nomenclature pointed to business, but all courses in the catalogs were assessed if the courses were available to regular students in an oncampus baccalaureate program. Courses were counted as business edu-

cation offerings if the title and catalog description suggested that the operation of a business organization was an integral element of the course content. Additionally, courses selected had to carry at least the modal value of credits for courses offered at that school, i.e., if most courses in a catalog earned three credits, then only three- or four-credit courses were counted. Courses fitting this description were then coded on the two dimensions noted: 1) the department in which it was taught and 2) the course content.

The offering department was classified as one of Economics, Business, Economics and Business (or similar nomenclature), or Other. Crosslisted courses were classified as belonging to the business department if they were cross-listed in business and any other department, or as economics if cross-listed in both economics and a department other than business.

Courses were then assigned on the content dimension into one of three broad categories, Business, Business-Related Economics, or Applied. Business courses had an unambiguous focus on decision making in an organizational setting: management, accounting, finance, marketing, or investment (including their subfields). It is important to note here that courses such as Business Communications, Business Ethics, Business Law, Business & Society, Management Information Systems, Operations Research, Organizational Behavior, Organization Theory, and Production / Operations Management were also found in other departments than those with business names (e.g., Mathematics, Communications, Sociology).

The second course content category was entitled Business-Related Economics to reflect the fundamental relationship between economic concepts and business learning. Courses in this category focus on areas of economics in which firm-level decisions are central, such as Industrial Organization, International Economics, Labor Economics (sometimes including collective bargaining), Managerial Economics, and Money and Banking. Some economics courses were excluded: Environmental Economics, Urban Economics, Economic History (though Business History might be included based on the catalog description), Econometrics, and Forecasting (again, depending on the orientation in the course description). Many colleges offered multiple courses in international economic topics, but no more than one per case was counted.

Course offerings in the Applied category address the administration and management of a particular kind of business or organization, not the discipline-specific skills necessary for that function. Thus, physical education administration, nursing management, military organization, and arts administration were coded as Applied courses, while related func-

tional courses on exercise therapy, geriatric care, military tactics, or choral direction were not. However, courses that focused on the finances and management of particular commercial industries such as real estate or insurance were coded as Applied courses. Each course was then assigned to only one cell of the coding matrix shown in Figure 1.

Courses were generally not included in any category if they fulfilled general education requirements for baccalaureate students in other majors, or otherwise fit outside of the criteria described above. Accordingly, introductory statistics and probability, principles of economics, intermediate micro- and macro-economics, and personal or family finance were generally not counted as business courses. Also excluded were internships, practicums, independent study, and non-specified special topics courses; country studies that focused on culture rather than commerce; management or executive development courses restricted to continuing education students; graduate courses; off-campus courses; or courses on Men, Women, and Work, or Race, Gender, and Work, Persuasion, COBOL, introduction to computers, and freshmen seminars. Taken together, these exclusions clarify the business education focus of the courses that were counted, all of which share in-class presentation of business subjects to baccalaureate students.

The structure in which business courses were offered was evaluated categorically. Five different structures were identified to describe how business education was organized within a college's overall department structure. These structure types are described below.

		Nature of Course		
		Economics	Business	Applied
Department Type	Business			
	Economics			
	Economics & Business			
	Other			

FIG. 1. Coding Matrix for Business Courses

Results

Taken together, the 182 colleges constitute a paradoxical institutional population, uniform in some aspects but quite diverse in others. As Table 1 shows, the typical college in the sample fits many of the archetypal standards: it is small, with fewer than 1600 students and 164 faculty, is overwhelmingly undergraduate in its enrollment, has a long history (the mean founding year is 1866), and is structured to allow close contact between students and faculty, with a student-faculty ratio of about 14:1. While 74 (41%) have some graduate, continuing education, or professional programs, these programs capture a relatively small portion of overall enrollment in these schools. All but 4—Purchase College (S.U.N.Y), Richard Stockton College of New Jersey, U. Minnesota at Morris, and U.N.C. Asheville—are private. They are located in 37 states, with the largest concentrations in the Northeast (64) and South (48).

Majors Offered

When the extent and nature of business curriculum is examined, the sample appears much less uniform. Within-group variation in business majors offered is shown in Table 2. As expected, given its stature in the pantheon of liberal arts subjects, over 80% of the institutions offer an economics major, making economics the principle avenue to business education in this group of schools. Yet in other ways the colleges collectively challenge the paradigm. There is a relatively frequent incidence of business education at a level that is certainly higher than implied by either the paradigm or the passages quoted above (Gustafson, 1995, Kraatz & Zajac, 1997). A relatively high number, 120, or 66% of the sample colleges, offer degrees either in business *per se* or in one or more business disciplines. More surprising is that 57, almost one third, give

TABLE 1 Descriptive Statistics for the 182 Colleges in the Study					
	п	Minimum	Maximum	Mean	Std. Dev.
Total enrollment	181	178	5493	1550.6	865.3
Undergrad enrollment	182	94	5367	1450.9	770.5
Undergrad % of total	181	40.2	100	93.3	14.1
Founding year	182	1696	1977	1866	49.2 yrs
Full-time faculty	164	12	264	97.47	57.3
Student-faculty ratio	164	7.12	34.47	14.33	7.1
Elite	42	= 23.1%			
All undergraduate	108	= 59.3%			

TABLE 2 Majors Offered				
Major	n	% of 182		
Economics	151	83.0		
Accounting	57	31.3		
Business administration	52	28.6		
Management	52	28.6		
Marketing	8	4.4		
Finance	6	3.3		
Business	50	27.5		
Any business major (from the previous 6)	120	65.9		

degrees in accounting, perhaps the most functional and technique-driven of the business disciplines. Majors in business, business administration, and management are also offered at a large number of schools, whereas very few offer majors in finance or marketing.

Links with the Scholarly Mainstream

Because disciplinary identity is a process in curriculum change (Gumport, 1987), an issue closely related to majors offered is how an institution's business education program fits with mainstream curriculum planning and scholarly thinking in the business disciplines and economics. Thus, linkage with professional scholarly organizations is a second gauge of integration with the mainstream, helping to show how specialization and differentiation drive competition in that marketplace. Formal AACSB accreditation is not a widely used strategy by the colleges; only six were directly involved in the accreditation process in 1995–96. Millsaps, Willamette, and Washington & Lee had completed accreditation, and Morehouse, Skidmore, and Union were AACSB candidates (AACSB web site). Accreditation should not define curriculum (an issue on which the AACSB is adamant), but its almost complete absence signals that business education as carried out in the liberal arts college environment may be qualitatively different than it is in its usual university setting. By contrast, economics curricula appear to be substantially similar to their counterparts in university settings.

Table 3 displays the number of colleges in which at least one faculty member was affiliated with the indicated organization. The American Economics Association (AEA) has the largest contingent of affiliated colleges, and affiliation with the other organizations follows substantially the same order as in Table 2. Only in the case of economics is there a statistically significant relationship between major offered and disci-



TABLE 3 College Affiliation with Professional Scholarly Organizations				
Organization	n	% of 182		
American Economics Association	148	81.3		
American Accounting Association	63	34.6		
Academy of Management	52	28.6		
Financial Management Association	37	20.3		
American Marketing Association	28	15.4		
Affiliation with AoM, AAA, AMA, or FMA	106	58.2		

plinary membership. Of the 151 colleges with an economics major, 133 have an AEA affiliation ($X^2 = 26.67$, p < 0.0001), and another 15 AEA members teach in schools without economics majors. In the second most popular discipline (as to both major and affiliation), there is no statistically significant relationship; only 32 of the 57 schools with accounting majors have an American Accounting Association (AAA) affiliation, whereas 31 of the schools that do *not* have a major are AAA-affiliated.

Evidence, then, suggests that in both formal curriculum and faculty affiliation with the disciplines, business education in American liberal arts colleges revolves around economics but freely welcomes business, given that two thirds of the colleges offer a business major. However, outside of economics, business in liberal arts colleges differs from mainstream business education programs in both individual and institutional affiliation with disciplinary professionalism. This difference is paradoxical, arising within a population of organizations that otherwise share many institutional characteristics. Some aspects of the difference are explored below by examining the structure of academic departments and course offerings to see how resources are used and product/market programs are put into effect.

Business Education Structures

"Structure" here describes the departmental framework in which business courses were concentrated. Five alternative structures were identified in the sample:

- ECON-ONLY is the most common type. In this configuration, there is no business department, so business-related courses are taught mostly in an economics department and in other departments (62 colleges, or 34.1% of the sample, had this structure).
- DOUBLE is a type in which the college has separate economics and

business departments, so business-related courses can be taught in either of them, or in other departments (n = 62, 34.1%)

- COMBINED structure types have a Business and Economics or a department with some similar name that reflects a combination of economics and one or more of the business disciplines (n = 41, 22.5%).
- BUSINESS types have all or almost all of their business offerings in a business department (n = 7, 3.8%).
- NONE. Ten colleges have no business offerings in any department, most often because they are based on a "great books" or similar pedagogy (n = 10, 5.5%).

The structures described above serve as an analytic framework to show that institutions of different structure offer different patterns of business education. The composition of the business education program of each of the four types of structure in which business courses are offered is shown by using Figure 1 as a template to show group means and standard deviations. Table 4 and the accompanying Figures 2 through 5 present these data and graphs for each structure type. They show the mean and standard deviation (in italics) of the number of courses offered per institution in the entire group for each of the classifications and for all cells of the matrix. The top row and left-hand columns of each table as well as the back and left bars of each figure show the mean totals. Subsequent rows show how those courses are organized into various departments; other columns show how the course type means vary.

The 62 colleges with the ECON-ONLY structure have an average of just over 12 business courses. They also have the greatest weight of economics in their total business offerings (9.26 out of 12.10, or 77%) and the fewest applied courses, reflecting the tendency of the pure liberal arts colleges to avoid professional and vocational education. Consistent with this observation, they also have the smallest number of business courses taught in departments other than economics. This type has significantly fewer (p < 0.05) courses in total than any other type.

Another group of 62 DOUBLE colleges have both economics and business departments. This group of colleges offers the most business education, averaging more than 36 courses. Here, the greatest weight (72%) of business education falls onto the business department, but there is also the most program diversity, with substantial numbers of applied courses, courses taught in other departments, and business-related economics courses taught in the economics department.

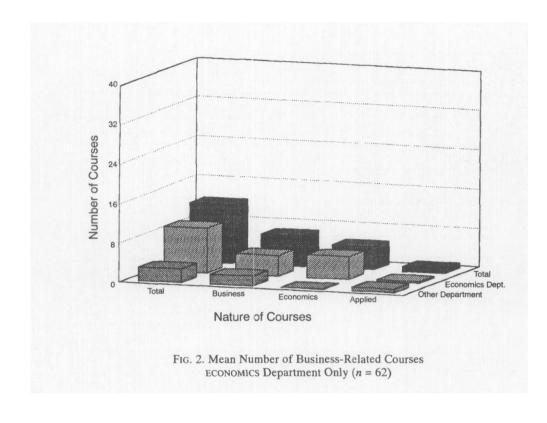
Colleges in the COMBINED program type have a single economics and business department or department with a similar name. This com-



Distribution of	of Business C	ourses in Libe	eral Arts College	es			
Number		Mean SD	_	Nature of Course			
Structure Type	of Colleges	% of Total	Courses per Department	Total	Business	Economics	Applied
ECON-ONLY	62	34.1	Total	12.01	6.34	4.76	1.00
				5.82	5.51	1.52	1.08
			Economics	9.26	4.27	4.71	0.27
See Figure 2	for a graph of	f the means.		4.72	4.66	1.52	0.45
			Other	2.84	2.06	0.05	0.73
			and the second	2.55	2.31	0.21	1.11
DOUBLE	62	34.1	Total	36.28	29.15	3.72	3.41
	Roma Del 19			14.78	12.70	1.66	3.04
			Economics	4.49	0.82	3.52	0.15
				2.24	1.32	1.47	0.35
See Figure 3	for a graph of	f the means	Business	26.26	24.90	0.18	1.18
				12.98	12.02	0.50	0.35
			Other	5.52	3.43	0.02	2.08
				4.26	3.05	0.13	2.04
COMBINED	41	22.5	Total	29.37	23.05	3.63	2.68
				8.20	7.03	1.20	2.65
			Econ &	24.39	19.88	3.63	0.88
See Figure 4	for a graph of	f the means.	Business	7.09	6.78	1.20	1.47
			Other	4.98	3.17	0.00	1.80
				3.55	2.32	0.00	1.95
BUSINESS	7	3.8	Total	28.00	24.00	1.14	2.86
				8.00	7.09	0.99	0.99
			Business	24.71	22.14	1.14	1.43
See Figure 5	for a graph of	f the means		7.67	6.66	0.99	0.00
			Other	3.29	1.86	0.00	1.43
				2.05	1.25	0.00	1.18
NONE	10	5.5		0	0	0	0
TOTAL	182	100.0					

bination structure connotes equal recognition of economics as a discipline and business as an application. These colleges have 19% fewer business-related courses than those with separate departments for economics and business (29.37 compared with 36.28). However, they are concentrated much more (83%) in the combined department, suggesting that it is a catch-all administrative framework for most business-related courses. Combined economics and business structures give greater weight to economics courses than do structures with both or with only a business department.

The 7 colleges in the BUSINESS structure type concentrate business



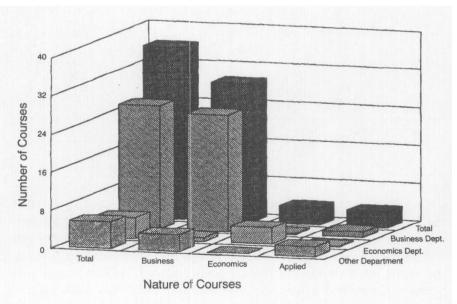
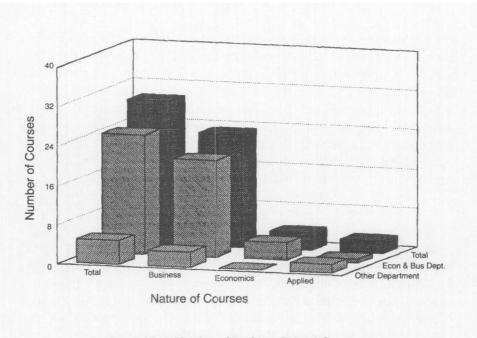
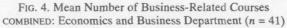
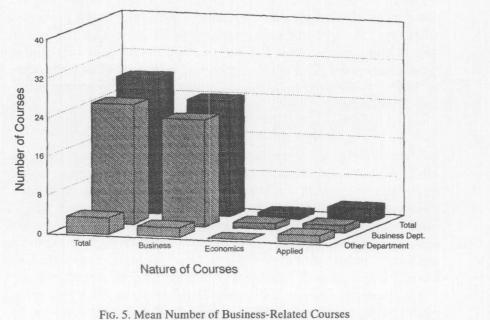


FIG. 3. Mean Number of Business-Related Courses DOUBLE: Economics Department and Business Department (n = 62)









BUSINESS Department Only (n = 7)



education squarely in the business department, while economics courses form a small portion of the total. The small size of this group accentuates the perceived distance between business education and mainstream liberal arts education. Applied courses also have comparatively more weight here, because schools that openly embrace business education also tend to support courses related to professional education. Ironically, those schools in the BUSINESS type offer fewer in total than either those in the DOUBLE category with both economics and business departments or those with COMBINED departments (p < 0.05).

Applied Education Offerings

In the aggregate, applied courses represent just less than 10% of the total offerings in business. Applied administration courses have the highest proportional weight in the BUSINESS type and the lowest in the ECON-ONLY type. Figure 6 shows the number of schools offering one or more applied administration courses in various subjects. The two courses most frequently offered illustrate an interesting contrast that shows some of the tensions affecting liberal education: the most common applied course is public administration, the contemporary descendant of a long tradition of liberally educating young people for public service; however, the next most common is recreation management, reflecting the physical education pursuits of contemporary collegians and the allure of professional sports management and marketing. Beyond this dissimilarity between the two most frequent, all but one (insurance industry) of the applied course areas offered by 10 or more colleges relates to administration that is usually carried out in the public or nonprofit environment. This concentration may point to another opportunity for business education in the liberal arts environment to present differentiated offerings.

Correlates of Business Education

A number of plausible explanations can be offered for variation in the extent or amount of business education, independent of the organizational structure of course offerings. Some factors that may provide explanatory insight include macro-level organizational factors such as total enrollment, specialization in undergraduate education, faculty size, and age. Arguably, colleges closer to the liberal arts paradigm (elite, older, and purely undergraduate) should have fewer business course offerings, whereas larger institutions are expected to have more business courses.

These possible relationships were tested using an OLS regression, with the total number of business courses as the dependent variable. Independent variables and their expected signs are as follows:



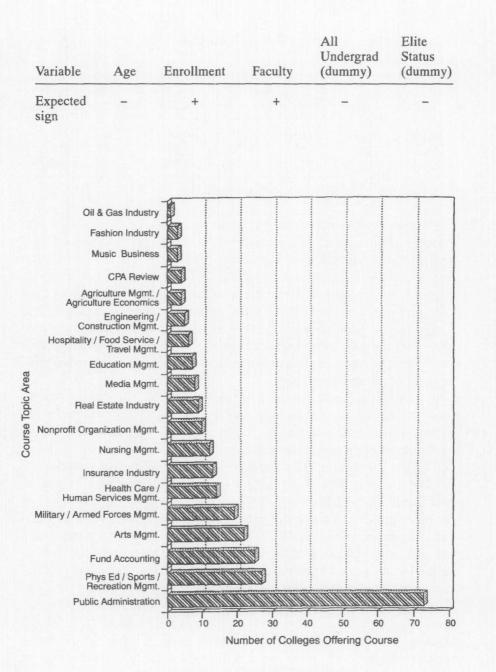


FIG. 6. Courses in Applied Administration



Variable	Intercept	Age	Total Enrollment	Faculty	All Undergrad (dummy)	Elite Status (dummy)
Estimate	16.71	0.03	0.01	-0.18	3.36	-9.55
t-value	3.68	0.02	0.00	-4.96	2.03	-3.62
p value	0.0001	0.1297	0.0001	0.0001	0.1008	0.0004

The actual regression results are as follows:

The parameter estimates support some, but not all, of the expected relationships. As expected, the relationship between elite status and total business offerings is negative and statistically significant. The more an institution is focused on undergraduate education, the greater its tendency to teach business. However, larger faculties are associated with fewer business offerings, though to a much lesser degree. The opposite signs of these results suggest possible tensions between student and faculty objectives in undergraduate education in these colleges. The age of the institutions does not contribute much explanatory information, given the size and significance of its parameter estimate.

In order to estimate the relative impact of these correlates, elasticities—which express change in percentage terms—were calculated at the means. Elasticities with respect to a particular correlate are calculated by multiplying the parameter estimate for that correlate times its mean, and dividing that product by the average number of business courses.

Thus, the elasticity at the mean of business courses with respect to new faculty is calculated as (-0.18 * 97.47) / 24.16 = -0.726 (97.47 is the mean number of faculty members from Table 1, and the mean number of business courses is 24.16). This can be interpreted to mean that a one percentage increase in faculty may generate a decline of 0.726% in an institution's number of business course offerings. The same calculation yields an elasticity of business education courses with respect to undergraduate enrollment of 0.025 and of elasticity with respect to institutional age of 0.161. Overall, the model explains about 38% of the variation in the dependent variable. Variations on this model were run to explore whether non-linearities in either undergraduate percentage of enrollment or faculty size were associated with business offerings; none of these relationships were significant.

Performance and Reputation Effects of Business Education

The finding that elite status is associated with fewer business courses leads to the third research question regarding the effect of business on measures of both performance and reputation. Two such outcome measures are used here: the USNWR rankings, which more accurately are reputation ranks, and the more comprehensive rankings done by Breneman (1994). These two performance measures are dependent variables in stepwise regression models where total business courses, total enrollment, and full-time faculty are independent variables. Regression results are in Table 5.

These results should be interpreted carefully, because the rankings assign the lowest number to the strongest performer. Consequently, positive regression coefficients indicate weaker performance or reputation, whereas negatively signed coefficients are associated with improved performance or reputation. Both regressions show strong associations. In the first regression, predictor variables enter in this order: elite status, total business courses, full-time faculty, and enrollment. In the second regression, elite status was not used because it is defined as being in the

TABLE 5 (a) Stepwise Regression of Breneman Ranking on Business Courses and Organizational Factors						
Independent Variable in order of entry	Parameter Estimate (Standard error)	<i>R</i> ²	ΔR^2	р		
Elite status	-81.296 (17.42)	0.464	0.464	< 0.001		
Total courses	3.090 (0.63)	0.569	0.105	< 0.001		
Full-time faculty	-1.525 (0.31)	0.655	0.086	< 0.001		
Total enrollment	0.062 (0.23)	0.675	0.020	< 0.01		
Intercept	256.802 (22.55)			< 0.001		
F _(4,113)	58.86			< 0.001		

TABLE 5 (b)

Stepwise Regression of USNWR Ranking on Business Courses and Organizational Factors

Independent Variable in order of entry	Parameter Estimate (Standard error)	<i>R</i> ²	ΔR^2	р
Full-time faculty	-0.713 (17.42)	0.399	0.300	< 0.001
Total courses	1.400 (0.24)	0.581	0.181	< 0.001
Total enrollment	0.023 (0.01)	0.601	0.020	< 0.05
Intercept	84.723 (9.02)			< 0.001
F _(4,113)	57.26			< 0.001

top of the USNWR rankings. Controlling for the other factors, business courses are therefore associated with lower placement in both the USNWR and Breneman rankings. Because the Breneman rank is an unweighted index of three measures and technically could range from 3 to 636, compared to the USNWR range of 1 to 140, the relative size of the estimators should not be overinterpreted. Though the order of entry is slightly different, the magnitude is similar, given the different scales of the two rankings. Nonetheless, taking into account the other factors in the regression model, it is clear that performance/reputation measures are lower for colleges with larger business education components in their curricula. It is interesting to note that larger enrollment is associated with lower performance/reputation ratings, while additional faculty is associated with higher ratings. The essential consistency between the two sets of rankings is demonstrated by the strong improvement in the Breneman ranking (more truly a performance than a reputation measure) when elite reputational status is added.

Summary of Empirical Results

The research questions posed in this study can be answered by summarizing the key results of the empirical analysis. Even though the study of economics is the most common avenue to business education in nationally recognized liberal arts colleges, business majors are offered by a majority of the colleges. Aside from economics, however, scholars and programs predominantly work outside of the various disciplinary mainstreams. Colleges structure their business course offerings in one of five distinct ways, ranging from no business courses at all to fully-developed business programs with their own departments. In most cases, there are courses in "applied administration" areas, concentrated in public sector activities. As expected, business education is not associated with elite status. In general, business education is associated with lower performance and reputation rankings.

Discussion

It was stated at the outset that curriculum is a critical element of strategic choice for liberal arts colleges. It is customary to attribute much of the archetypal liberal arts college strategy to the traditions of that kind of institution, but traditions evolve too slowly to be detected through a cross-sectional study. This study has shown that variations in curriculum are associated with a number of other important policy variables that executives in liberal arts colleges can more actively manage and that sector traditions are not the only strong influence on curriculum. Course content, organization structure, and student and faculty recruiting are decision areas that administrators can manipulate to achieve chosen educational (and institutional) results from curriculum.

For these best-known institutions this study has shown how business content connects a wide variety of subjects. The fact that the commonality is not always explicitly recognized confirms Mintzberg's (1988) notion that strategy can be emergent as well as deliberate. Correspondingly, it can become more deliberate when administrators and curriculum planners try to shape future curricula in ways that may differ from what tradition demands. The snapshot of these institutions in the mid-1990s does not reveal the dynamics or internal processes that have gotten them to this point. Inertia as a factor in organization decision making and path dependence as a process suggest that institutions with tenured faculty have to find things for them to teach, even if the curricular premises under which they were hired in the distant past no longer hold true. Moreover, it does not stretch the imagination to suggest that resource-poor institutions may see business education as a prop or subsidy for traditional arts and sciences subjects that are closer to the tradition; in fact, financial forces are often considered as the principal motivators for liberal arts colleges to add business course offerings (Breneman, 1994).

It also appears as if structure, independent of course content, is a strategic management tool for curriculum planners, in that differences in approaches to business education can be associated with structure, independent of content. Colleges have chosen, and can choose, to concentrate business education in a small number of departments or, alternatively, to diffuse it widely throughout various disciplinary departments. At the extremes, two institutional types are seen, both of which are thinly represented in the population of liberal arts colleges. One is so focused on business technique that it excludes economics as an independent discipline. The other type has no business courses, or even economics courses that explicitly address business. Together, however, these two types make up less than 10% of the study sample. A far greater portion-two thirds-offers students explicit business education within the institutional framework of a liberal arts college.

To the extent that strategy represents a match that an organization makes with its environment (Hofer & Schendel, 1978; Miles & Snow, 1978), we can see the variety of strategic management forces at work. Curriculum represents a means of coping with suppliers and customers as competitive forces in the environment (Porter, 1980). On the market side, the presence of business in the small college environment is clearly a marketing tool (though its extent or effectiveness is not evaluated here); business education links a college's curriculum to career opportu-



nities and to professional education, and so it is a way to attract students and their revenues. In addition, curriculum choices affect faculty recruiting and administrators' choice of whether administrators employ disciplinary specialists (or not) and encourage formal or informal affiliations with disciplinary mainstreams (or not).

The effects on actual performance are unclear because unambiguous performance measures are not available. But, a clear "class distinction" is undoubtedly present, with reputational leaders, the traditional elite with prestige brand names, using a strategy of offering little business education. This confirms Kraatz and Zajac's (1997) conclusion that professional education reduces legitimacy. As noted above, there is a clear relationship between reputational leadership, which has a legitimizing effect, and organizational success. For some of these reputational leaders business is a sideline to the more fundamental arts, humanities, and social and physical sciences. Yet this pure liberal arts strategy meets the needs of a tiny market segment; students attending the elite schools in 1995–96 constituted 0.25% of total undergraduate attendance (U.S. Department of Education, 1995).

Indeed, the penetration of business education suggests the development of alternative models of curriculum in the small-college sector of the higher education marketplace. Kushner (1997) suggested an approach to business education that can be entirely consistent with the educational traditions of the liberal arts. One reason that such institutions may want to include business explicitly is that the typical liberal arts college curriculum already contains many courses that are viewed as important components of a modern business education. Courses listed in Table 6 are examples of those taught in "other departments" in the empirical analysis. Though they may lack the structural link of a general or discipline-specific business major, student taking a substantial number of the courses are exposed to the same issues that face students majoring in business. Moreover, they can be taught in a manner close to the liberal educational tradition: in small classes, with a positive and analytic pedagogy, as opposed to a problem-solving and technique-building approach (Kushner 1997). Some colleges-Mount Holyoke, Pitzer, and Denison-have in fact instituted "administrative studies" or "organizational studies" majors or minors to package their enterprise-related offerings. It is interesting to note that strategic management as a subject is likely to be a salient element of the curriculum in such a program.²

This study is one of the first to assess the curriculum of nationally known liberal arts colleges from a strategic management perspective. Interpretations of the results should take into account the peculiarities of the empirical analysis. The variable of central interest in much of the ar-

TABLE 6 Business-Related Courses i	n Non-Business Departments
Department	Business-Related Course Offerings
Art	Advertising Design
Communications	Advertising, Public Relations
Computer Science	Management Information Systems
International Affairs	International Business
Language	Business in a specific national environment
Mathematics	Operations Research
Military Science	Leadership
Philosophy	Business Ethics, Organizations in Society
Political Science	Public Administration
Psychology	Organizational Behavior, Industrial Behavior
Religion	Business Ethics, Organizations in Society
Sociology	Organization Theory, Business Ethics, Organizations in Society

ticle is the total count of business courses, with the pattern into which these courses fall a secondary matter. To accept the conclusions of this article, a reader must accept the coding scheme and its application. Additionally, the analyses require interpretation of the business nomenclature and terminology.³

Two alternative approaches might motivate additional empirical study. One is to examine the behavior of this population over time, in order to study the dynamics of strategic change in a time-series rather than a cross-section. With sufficient data, techniques such as cluster analysis and structural equation modeling might be appropriate. These might help to identify strategic types, to supplement the structure type approach used here. With sufficient data, structural equation modeling could help to discern some of the underlying causal relationships between organizational factors and business education, and between these factors and organizational performance. Another approach would be to conduct case studies, a commonly used technique for analyzing curricular and institutional change in small colleges (Breneman, 1994; Chaffee, 1984; Schroeder, 1993). Case analyses are more likely to illuminate the social and political processes that drive these adaptations.

Conclusion

Does business belong in the liberal arts college environment? Conceptually, the answer has always been "no," but evidence shows that this subject matter appears to have been embraced by a sizable majority of



the best-known institutions, if not the most prestigious, elite schools. The wider group may teach business based on a multidisciplinary model that joins the subject of business enterprise with the tradition of educational liberality, whereas the smaller elite group offers business education only as an offshoot of economics. The majority of students who attend institutions of this type are able to acquire an undergraduate degree in one or more business subjects.

In terms of competitive strategy, then, curriculum may not be as significant a differentiating factor when students are considering which type of institution to attend, but it is a factor once a student has decided on an institutional type. The other elements of the paradigm, however size, heritage, private status, pedagogy, and undergraduate focus demonstrate a strong commonality within the population. In sum, business in the liberal arts setting need not be treated as antithetical to the mainstream but can be embraced as long as it is done in keeping with other institutional traditions. It provides a means for colleges to compete amongst each other, while they compete with other institutional forms using other organizational features. Competing in this manner may enable them to respond to demand, by attracting students who are interested simultaneously in business education and the small-college setting.

APPENDIX Colleges Examined in the Study			
Agnes Scott	GA	Blackburn	IL
Albion	MI	Bowdoin*	ME
Albright	PA	Bryn Mawr*	PA
Allegheny	PA	Bucknell University*	PA
Alma	MI	Carleton*	MN
Amherst*	MA	Carroll	W
Antioch	OH	Centenary College of Lousiana	LA
Augustana	IL	Central	LA
Austin	TX	Centre	KY
Barat	IL	Chatham	PA
Bard*	NY	Chestnut Hill	PA
Barnard*	NY	Claremont McKenna*	CA
Bates*	ME	Coe	IA
Beloit	WI	Colby*	MI
Benedictine	KS	Colgate*	NY
Bennington	VT	College of the Atlantic	ME
Berea	KY	College of Christendom	VA
Bethany	WV	College of the Holy Cross*	MA
Birmingham-Southern	AL	College of Mt. Saint Vincent	NY

College of St. Repediat	MN	Luther	IA
College of St. Benedict College of Wooster	OH	МасМигтау	IL
Colorado*	CO	Macalester*	MN
Concordia College at Moorhead	MN	Manhattanville	NY
Connecticut*	CT	Marlboro	VT
Cornell	IA	Marymount Manhattan	NY
Davidson*	NC	Middlebury*	VT
Denison	OH	Mills	CA
DePauw	IN	Millsaps	MS
Dickinson*	PA	Monmouth	IL
Drew	NJ	Moravian	PA
Earlham	IN	Morehouse	GA
Eckerd	FL	Mount Holyoke*	MA
Emmanuel	MA	Muhlenburg	PA
Erskine	SC	Nebraska Wesleyan	NE
Franklin College of Indiana	IN	Neumann	PA
Franklin and Marshall*	PA.	Oberlin*	OH
Furman	SC	Occidental*	CA
Georgetown	KY	Oglethorpe	GA
Gettysburg	PA	Ohio Wesleyan	OH
Goddard	VT	Pitzer*	CA
Gordon	MA	Pomona	CA
Goshen	IN	Presbyterian	SC
Goucher	MD	Principia	IL
Grinnell*	IA	Providence	RI
Guilford	NC	Purchase College	NY
Gustavus Adolphus*	MN	Randolph-Macon Women's	VA
Hamilton	NY	Randolph-Macon	VA
Hamline	MN	Reed*	OR
Hampden-Sydney	VA	Regis College	MA
Hampshire	MA	Rhodes	TN
Hanover	IN	Richard Stockton	NJ
Hartwick	NY	Ripon	WI
Hastings	NE	Rockford	IL
Haverford*	PA	Rosemont	PA
Hendrix	AR	St. Andrews Presbyterian	NC
Hiram	OH	St. John's	NM
Hobart and William Smith	NY	St. John's	MD
Hollins	VA	St. Lawrence	NY
Норе	MI	St. Mary's College of Maryland	MD
Houghton	NY	St. Olaf	MN
Huntingdon	AL	Salem	NC
Illinois	IL	Sarah Lawrence*	NY
Illinois Wesleyan	IL	Scripps*	CA
Judson	AL	Shepherd	WV NY
Juniata	PA	Siena Simon's Book College of Bard	MA
Kalamazoo	MI	Simon's Rock College of Bard	NY
Kenyon*	OH	Skidmore Smith*	MA
Knox	IL PA	Southwestern	TX
Lafayette*	PA IL	Spelman	GA
Lake Forest	WI	Swarthmore*	PA
Lawrence	PA	Sweet Briar	VA
Lebanon Valley Lewis and Clark	OR	Thomas Aquinas	CA
Lewis and Clark	UN	a montano i adminino	

Thomas More	KY	Washington and Lee*	VA
Transylvania	KY	Wellesley*	MA
Trinity*	CT	Wells	NY
Union*	NY	Wesleyan College	GA
University of Dallas	TX	Wesleyan University*	СТ
University of Judaism	CA	Western Maryland	MD
University of Minnesota at Morris	MN	Westminister	МО
University of N.C. at Ashville	NC	Westminister	PA
University of Puget Sound	WA	Westmont	CA
University of the South*	TN	Wheaton	MA
Ursinus	PA	Wheaton	IL
Vassar*	NY	Whitman	WA
Virginia Military Institute	VA	Whittier	CA
Virginia Wesleyan	VA	Willamette	OR
Wabash*	IN	William Jewell	МО
Wartburg	IA	Williams*	MA
Washington	MD	Wittenberg	OH
Washington and Jefferson	PA	Wofford	SC

* = designated "elite"

Notes

¹Using these data assumes that (a) courses listed are taught, (b) course contents are as listed, and (c) the same number of course sections is taught of each one. In most cases these assumptions rarely hold together. It can be argued that although the assumptions may not hold in each case, the resulting errors from the first and third assumptions are likely to cancel each other out, leaving the second assumption as a potential source of error. However, the catalogs remain the best indicator of curriculum

²Thanks to a referee for noting the relationship between the subject of the article and the curricular content being examined.

³Additional information on how this was conducted is available from the author.

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